

# **TEMPERATURE DETECTOR CIRCUIT AND METHOD THEREOF**

5

## **ABSTRACT OF THE DISCLOSURE**

To generate a signal when a target temperature is reached, a temperature detector circuit comprises a first and second current sources connected in series, of which the first current source generates a PTAT current and the second current source is supplied with a temperature-independent reference voltage to generate a second current proportional to the reference voltage. The first and second currents are a first and second reference currents, respectively, at a reference temperature, and the first and second current sources are configured such that the ratio of the second reference current to the first reference current is proportional to the ratio of the target temperature to the reference temperature.